

MI FluFocus

Influenza Surveillance and Avian Influenza Update

Bureau of Epidemiology Bureau of Laboratories



August 9, 2007 Vol. 4; No. 32

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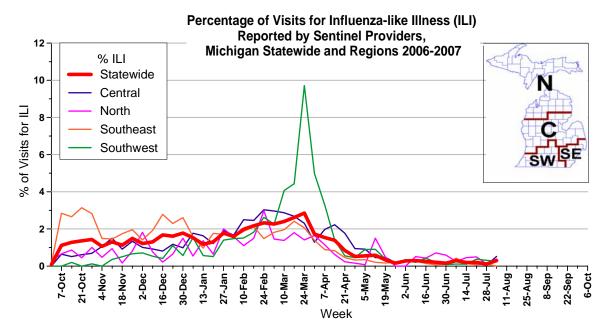
New updates in this issue:

- Michigan Surveillance: Influenza activity remains at low, off-season levels.
- Avian Influenza: Additional avian influenza H5N1-positive wild ducks found in Germany.

Michigan Disease Surveillance System: The last week saw both aggregate flu-like illness reports and individual influenza reports holding steady near the previous week's levels. These indicators are expected to continue to fluctuate at baseline levels until fall.

Emergency Department Surveillance: Emergency department visits due to both constitutional and respiratory complaints remained steady overall this past week. Reported levels are consistent with levels from this time last year. Eight constitutional alerts in Regions 2N(1), 2S(2), 3(2), 5(2), and 7(1) and three respiratory alerts in Regions 1(1), 2N(1) and 8(1) were generated last week.

Sentinel Surveillance (as of August 9): During the week ending August 4, 2007, the proportion of visits due to influenza-like illness (ILI) in Michigan remained at low a low level; 0.3% of all visits. This represents 8 cases of ILI out of 2681 total patient visits; twelve sentinels provided data for this report. By surveillance region, the proportion of visits due to ILI was 0.5%, Central; 0.4%, North; 0.0%, Southeast; and 0.3%, Southwest. Note that these rates may change as additional reports are received.



As part of pandemic influenza preparedness, CDC and MDCH highly encourage and recommend year-round participation from all sentinel providers. New practices are encouraged to join the sentinel surveillance program today! Contact Rachel Potter at 517-335-9710 or potterr1@michigan.gov for more information.

Laboratory Surveillance (as of August 9): For the 2006-2007 influenza season, there have been 158 culture-confirmed cases from the MDCH Lab:

- 70 A:H1N1 (Southeast (23), Southwest (21), Central (16), North (10))
- 34 A:H3N2 (North (12), Southeast (12), Central (7), Southwest (3))
- 54 B (Southeast (18), Central (17), Southwest (12), North (7))

All influenza B cultures have been B/Malaysia, except for six B/Shanghai results from the Southeast region.

***As a reminder, the positive predictive value of influenza rapid tests decreases during times of low influenza prevalence. MDCH suggests that during periods of low influenza activity in your community, all positive rapid tests results be confirmed by sending in a specimen for viral culture; this can be arranged through your local health department.

Influenza-Associated Pediatric Mortality (as of August 9): For the 2006-2007 season, there are no confirmed reports of influenza-related pediatric mortality in Michigan. MDCH and CDC are currently investigating two possible influenza-associated pediatric mortalities from March, one in the Southwest region and one in the Southeast region.

***Reminder: The CDC has asked all states to continue to collect information on any pediatric death associated with influenza infection. This includes not only any death in a child less than 18 years of age resulting from a clinically compatible illness confirmed to be influenza by an appropriate laboratory or rapid diagnostic test, but also unexplained death with evidence of an infectious process in a child. Refer to http://www.michigan.gov/documents/fluletter_107562_7.pdf for the complete protocol. It is important to immediately call or fax information to MDCH to ensure that appropriate clinical specimens can be obtained.

Congregate Settings Outbreaks (as of August 9): There has been one report of an influenza A outbreak from a Central region extended care facility for the 2006-2007 influenza season.

National: For CDC weekly surveillance report archives, visit http://www.cdc.gov/flu/weekly/fluactivity.htm.

International (WHO, as of March 29): Overall influenza activity in the northern hemisphere remained moderate in weeks 8–11. In North America, influenza activity declined in general, while in Europe and some Asian countries and areas, widespread activity continued, with influenza A(H3N2) viruses predominating. Influenza A(H1N1) viruses circulated in the United States and in a few eastern European countries. Influenza B viruses circulated at low levels.

For influenza activity from individual countries, please visit the full WHO article "Seasonal Influenza Activity in the World, 2007" at http://www.who.int/csr/disease/influenza/update/en/.

Weekly reporting to the CDC has concluded for the 2006-2007 influenza season.

End of Seasonal Report

Avian Influenza Activity

WHO Pandemic Phase: Phase 3 - Human infection(s) with a new subtype, but no human-to-human spread or rare instances of spread to a close contact.

International, Wild Birds (Reuters Alertnet, August 4): Two ducks found dead near Munich in southern Germany tested positive for the deadly H5N1 bird flu virus and a 3rd was contaminated with a milder strain, a state laboratory said.

The 3 ducks were found dead near Speichersee, a lake to the northeast of Munich, Elke Reinking, spokeswoman for the Friedrich-Loeffler-Institut, said on Friday. The surrounding area would be searched for any other dead birds.

Last year, some 13 European Union member states had confirmed cases of bird flu -- Germany, Austria, Denmark, Italy, Greece, Britain, the Czech Republic, Poland, Slovakia, Slovenia, Sweden, France and Hungary.

More than 30 countries have reported outbreaks in the past year, in most cases involving wild birds.

Globally, the H5N1 virus has killed nearly 200 people out of over 300 known cases, according to the World Health Organization. None of the victims were from Europe.

Michigan Wild Bird Surveillance (USDA, August 9): For the 2007 testing season, 226 Michigan samples have been taken so far, comprised of 100 live bird samples, 99 hunter-killed birds and 27 morbidity/mortality samples.

According to the National HPAI Early Detection Data System website, HPAI subtype H5N1 has not been recovered from any Michigan samples tested to date, or from the 9756 birds or environmental samples tested nationwide. The 2007 testing season will run from April 1, 2007-March 31, 2008. For more information, visit the National HPAI Early Detection Data System website at http://wildlifedisease.nbii.gov/ai/.

To learn about avian influenza surveillance in Michigan wild birds or to report dead waterfowl, go to Michigan's Emerging Disease website at http://www.michigan.gov/emergingdiseases.

Please contact Susan Vagasky at VagaskyS@Michigan.gov with any questions regarding this newsletter or to be added to the weekly electronic mailing list.

Contributors

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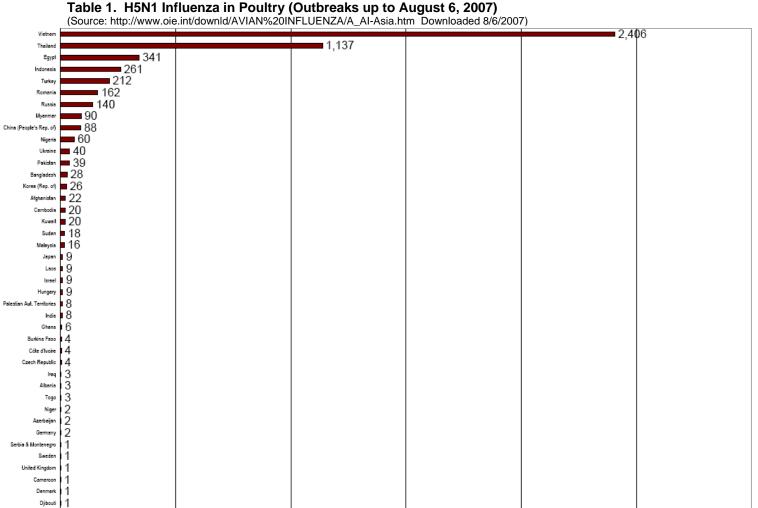


Table 2. H5N1 Influenza in Humans (Cases up to July 25, 2007)

1,000

France

(http://www.who.int/entity/csr/disease/avian_influenza/country/cases_table_2007_07_25/en/index.html Downloaded 7/25/2007) Cumulative number of lab-confirmed human cases reported to WHO. Total number of cases includes deaths.

Outbreaks of Avian Influenza (subtype H5N1) in poultry. From the end of 2003 to 06 August 2007

2,000

2,500

3,000

Country	20	2003		2004		2005		2006		2007		Total	
	cases	deaths											
Azerbaijan	0	0	0	0	0	0	8	5	0	0	8	5	
Cambodia	0	0	0	0	4	4	2	2	1	1	7	7	
China	1	1	0	0	8	5	13	8	3	2	25	16	
Djibouti	0	0	0	0	0	0	1	0	0	0	1	0	
Egypt	0	0	0	0	0	0	18	10	20	5	38	15	
Indonesia	0	0	0	0	20	13	55	45	27	23	102	81	
Iraq	0	0	0	0	0	0	3	2	0	0	3	2	
Lao PDR	0	О	0	0	0	0	0	0	2	2	2	2	
Nigeria	0	О	0	0	0	0	0	0	1	1	1	1	
Thailand	0	О	17	12	5	2	3	3	0	0	25	17	
Turkey	0	0	0	0	0	0	12	4	0	0	12	4	
Viet Nam	3	3	29	20	61	19	0	0	2	0	95	42	
Total	4	4	46	32	98	43	115	79	54	33	319	192	